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I N S E C T P E S T S U R V E Y B U L L E T I N

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I N S E C T N O T E S F R O M C O S T A R I C A I N 1 9 3 5

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This paper is supplemental to the Insect Notes from Costa Rica in 1934, published as a Supplement to No. 4, Insect Pest Survey Bulletin, Vol. 15, 1935.

The list does not represent the complete collection for the year, but only those notes that give additional data to the previous year.

The same arrangement has been followed as in the previous list. It is not deemed necessary to reissue the map of Costa Rica, as it may be consulted in the original paper. The abbreviations for the localities given in the previous list apply in this one.

COLEOPTERA

Insect and locality	Collected on	Date and notes
ANTHICIDAE		
<i>Anthicus asphaltinus</i> Champ. Paso Ancho	<i>Annona muricata</i> <i>Brassica pekinensis</i> <i>Citrus aurantifolia</i> <i>Citrus nobilis</i> <i>Citrus sinensis</i> <i>Cornutia cymosa</i>	<i>Dahlia rosea</i> <i>Hibiscus rosa-sinensis</i> <i>Impatiens balsamina</i> <i>Phytolacca octandra</i> <i>Psidium guajava</i> <i>Vitis</i> spp.
<i>Notoxus eximius</i> Champ. Guadalupe San Pedro	<i>Cinnamomum camphora</i> <i>Coffea arabica</i> <i>Epidendrum</i> sp. <i>Eugenia uniflora</i>	<i>Malus sylvestris</i> <i>Persea americana</i> <i>Tabebuia pentaphylla</i>
BRENTHIDAE		
<i>Brentus mexicanus</i> Boh. San Jose San Pedro	<i>Acnistus arborescens</i> <i>Annona cherimola</i> <i>Coreopsis lanceolata</i> <i>Dombeya wallichii</i>	<i>Panicum barbinodes</i> <i>Persea americana</i> <i>Poinsettia pulcherrima</i>
CANTHARIDAE		
<i>Chauliognathus histrio</i> (Dej.) San Pedro	<i>Iris laevigata</i>	April, in flowers June, at sap in wound August, October to December
CARABIDAE		
<i>Euproctus subdeletus</i> Bates San Pedro	<i>Persea drymifolia</i>	June January
<i>Lebia soror</i> Chaud. Waldeck	<i>Theobroma cacao</i>	April

Insect and locality	Collected on	Date and notes
CERAMBYCIDAE		
<i>Acanthoderes circumflexus</i> Tw. Santa Rosa de Cartago	<i>Citrus sinensis</i>	September
<i>Callichroma holochlora</i> Bates Liberia	<i>Zea mays</i>	February
<i>Esthlogena porosa</i> Bates San Jose	<i>Ficus carica</i>	September, in dry rolled leaf
<i>Hippopsis lemniscata</i> (F.) San Pedro	<i>Chrysanthemum</i> sp.	June
<i>Ochresthes pollinosus</i> (Chevr.) San Pedro	<i>Acnistus arborescens</i>	December
<i>Pterichtiya pisciformis</i> Thomson San Pedro	<i>Chayota edulis</i>	October
<i>Ptychodes lecontei</i> Thomson Liberia	<i>Calathea insignis</i>	July
CHRYSOMELIDAE		
<i>Allochroma sexmaculatum</i> Clark San Pedro	<i>Chayota edulis</i> <i>Zea mays</i>	June July
<i>Altica amethystina</i> Oliv. San Pedro	<i>Phaseolus vulgaris</i>	December
<i>Asphaera nobilitata</i> (F.) Waldeck	<i>Panicum maximum</i>	July
<i>Calligrapha elegantula</i> Jacoby El Pisote		September

Insect and locality	C o l l e c t e d o n	Date and notes
Cerotoma rogersi Jacoby Juan Vinas Pejivalle San Pedro Santiago	Amygdalus persica Panicum maximum Phaseolus lunatus Zea mays	Throughout year
Cerotoma salvini Baly Descamparados El Pisote San Pedro	Chayota edulis Cucurbita pepo Galinzoga hispida Impatiens balsamina	July to December
Chirida guttata (Oliv.) San Pedro Waldeck	Ipomoea sp. Phaseolus vulgaris Zea mays	July
Colaspis fulvotestacea Lef. Waldeck	Theobroma cacao	April
Colaspis prasina Lef. Sarchi	Chayota edulis Vernonia brachiata	January October, November
Colaspis sculpta Jacoby Waldeck	Theobroma cacao	April July
Colaspis submetallica Jacoby Waldeck	Theobroma cacao	April July
Cybocephalus trizonatus Suffr. Gundalupe	Annona cherimola Byrsonima crassifolia	Citrus limonia Coffea arabica

Insect and locality	C o l l e c t e d o n	Date and notes
Cryptocephalus trizonatus-Cont'd San Jose San Juan	Croton gossypifolium Eugenia uniflora Ficus carica Gerbera jamesoni Lactuca sativa Ligustrum japonicum Malus sylvestris	Parkinsonia aculeata Prunus salicina Pyrus communis Rosa sp. Schinus molle Spondias mombin
Ctenochira cumulata (Boh.) Orosi San Pedro Waldeck	Chayota edulis Cernutia cymosa Gramineae (grass) Ipomoea sp.	March July October
Ctenochira vivida (Boh.) Waldeck	Ipomoea sp.	July
Diabrothica balteata Lec.	Ageratum conyzoides Asparagus officinalis Beaumontia grandiflo- ra Beta vulgaris crassa Canarium odoratum	Brassica oleracea capi- tata Citrus aurantium Datura stramonium Daucus carota Phaseolus lunatus Vicia faba
Diabrotica fulvicornis Jacoby Cartago Juan Vinas	Acnistus arborescens Chayota edulis Codiaeum variegatum Datura candida Erythrina glauca	Euphorbia sp. Hibiscus rosa-sinensis Phaseolus vulgaris Spondias mombin Zea mays
Diabrotica fulvosignata Baly Waldeck	Theobroma cacao	January July

Insect and locality	C o l l e c t e d o n	Date and notes
Diabrotica nummularis Harold Juan Vinas San Jose San Juan San Pedro San Rafael	Allamanda cathartica Brassica pekinensis Beta vulgaris crassa Casimiroa edulis Cestrum nocturnum Chenopodium ambrosioides Citrus aurantium Citrus nobilis Coffea arabica Colocasia esculenta Conostegia lanceolata Dahlia rosea Datura candida Datura stramonium Daucus carota Fortunella margarita Hemerocallis sp. Lactuca sativa	July Important injury to dahlia, allamanda, and pe-tsai. <u>Zelus ruficeps</u> Stal eating this beetle on July 11.
Diabrotica porracea Harold Barba El Pisote San Jose San Isidro San Rafael	Amygdalus persica Dahlia rosea Gladiolus sp. Ipomoea sp. Pennisetum clandestinum	Important injury to snap beans
Diabrotica theimeii Baly San Pedro	Chayota edulis	October
Diabrotica viridula (F.) San Pedro	Impatiens balsamina Vicia faba	January
	Lippia berlandieri Lycopersicum esculentum Myosotis sylvatica Panicum barbinode Phaseolus lunatus Poinsettia pulcherrima Prunus salicina Psidium molle Pyrus communis Roystonea regia Solanum torvum Solanum wendlandi Sterculia diversifolia Trichilia havanensis Tropaeolum majus Verbesina turbacensis Pennisetum purpureum Persea americana Phaseolus vulgaris Tripsacum latifolia Zantedeschia aethiopica	

Insect and locality	Collected on	Date and notes
<i>Diabrotica vittata</i> (F.) Tres Rios	<i>Allium cepa</i> <i>Brassica oleracea capitata</i>	January Serious injury April to pe-tsai cabbage
<i>Disorycha trifasciata</i> Clark Paso Ancho Waldeck	<i>Musa sapientum</i> <i>Spondias mombin</i>	July August
<i>Epitrix fuscata</i> (Duv.) San Pedro San Rafael	<i>Acnistus arborescens</i> <i>Cleome spinosa</i> <i>Datura stramonium</i> Gramineae (grass)	<i>Ipomoea batatas</i> <i>Ipomoea tiliacea</i> <i>Phaseolus vulgaris</i>
<i>Galeruca encaustica</i> Germ.	<i>Chayota edulis</i> <i>Erythrina rubrinervia</i> <i>Hedychium coronarium</i>	<i>Vernonia brachiata</i> <i>Zea mays</i>
<i>Homophoea cyanipennis</i> octo- maculata (Grotch) La Irma Pejivalle San Antonio San Jose	<i>Ananas sativus</i> <i>Annona squamosa</i> <i>Asclepias curassavica</i> <i>Brassica japonica</i> <i>Citrus limonia</i> <i>Codiaeum variegatum</i> <i>Crotalaria spectabilis</i> <i>Datura candida</i> <i>Datura suaveolens</i>	January <i>Ficus carica</i> <i>Lycopersicum esculentum</i> <i>Mangifera indica</i> <i>Oryza sativa</i> <i>Panicum barbinode</i> <i>Poinsettia pulcherrima</i> <i>Punica granatum</i> <i>Rheedia edulis</i>
<i>Malacorhinus decempunctatus</i> Jacoby Waldeck	<i>Theobroma cacao</i>	July
<i>Metritona angularis</i> (Champ.) Waldeck	<i>Ipomoea</i> sp.	July

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Insect and locality	C o l l e c t e d o n	P l a n t s
Nodonota irazuensis - Cont'd.	Inga laurina Lagerstroemia speciosa Lantana camara Lucuma mammosa Lupinus sp. Melaleuca leucadendron Nicotiana tabacum Passiflora quadrangul- aris Pennisetum clandestin- um Persea pittieri Phaseolus lunatus Plantago major Poinsettia pulcherrima	Polygonum acre Prunus salicina Psidium molle Punica granatum Rheeda edulis Rosmarinus officinal- is Solanum nigrum Tabebuia guayacan Tagetes patula Taraxacum officinale Thespesia populnea Trem micrantha Triumfetta josefina Zinnia elegans
Nodonota lateralis (Jacoby) Juan Vinas Paso Ancho San Jose	Aenistus arborecens Annona squamosa Asparagus officinalis Canarium odoratum Citrus aurantifolia Cobaea scandens Codiaeum variegatum Congoa velutina Corchorus lanceolatus Croton gossypifolium Dahlia rosea Daucus carota Dombeya wallichii Gliricidia maculata Vernonia brachiata	Lupinus sp. Malacra radiata L. Malpighia glabra Manihot esculenta Pelargonium zonale Pennisetum purpureum Persea americana Persea pittieri Poinsettia pulcherrima Schinus molle Solanum sp. Tagetes patula Verbena sp.
Oedionychis roichei Harold Juan Vinas		Seriously damaging dahlia and lupine flowers
		August

Insect and locality	C o l l e c t e d o n	Date and notes
Oedionychis tenuicincta Jacoby	Dombeya wallichii	August
Pachybrachys femoratus (Oliv.) Paraíso Paso Ancho	Arracacia xanthorrhiza Asparagus officinalis Cupressus benthami Hibiscus rosa-sinensis Lippia berlandieri	Psidium guajava Sterculia diversifolia ^{is} Vitís tiliaefolia Zinnia elegans
CLERIDAE		
Enoclerus villicus (Gorh.) Paso Ancho San Pedro	Chayota edulis Jussiaea decurrens Zea mays	June July August, October
COCCINELLIDAE		
Epilachna abrupta Gorh. San Isidro de Coronado San Pedro	Cestrum macrophyllum Erythrina rubrinervia Solanum aculeatissimum	May July August
Epilachna borealis (F.)	Chayota edulis	June to August Serious injury
Epilachna varivestis Muls. San José San Pedro	Chayota edulis	August Serious injury September
Epilachna defecta Muls. San José	Annona cherimola Capsicum annum Cestrum aurantiacum	Conostegia lanceo- lata Cucurbita pepo
Epilachna virgata Muls.	Duranta plumieri	Serious injury
Thalassa glauca (Muls.) San Pedro	Erythrina rubrinervia Persea americana	January April

Insect and locality	Collected on	Date and notes
ELATERIDAE Monocrepidius aversus Lec. San Pedro	Persea americana	May
ENDOMYCHIDAE Bystus hemisphaericus (Gerst.) Waldeck	Theobroma cacao	July
EROTYLIDAE Coccimorphus dichrous Lac. Pejivalle Waldeck	Elaeis guineensis Phaseolus vulgaris	February July
Cypherotylus elevatus (F.)	Chayota edulis Citrus sinensis	July August
Napalips fuscus Reitt. Waldeck	Theobroma cacao	July
Homoeotelus jansoni Crotch San Pedro	Coffea arabica	November
LAMPYRIDAE Aspidosoma aegrotum Gorb. San Pedro	Citrus sinensis Pyrus communis	August December
Aspidosoma laterale (F.) Juan Vinas	Coffea arabica	August
NITIDULIDAE Conotelus mexicanus Murr. Paso Ancho San Pedro	Chrysanthemum maximum Coreopsis lanceolata Cucurbita pepo	August January March
	Rosa sp.	In flowers

Insect and locality	Collector	Date and notes
Conotelus stenoides Murr. San Pedro San Rafael	Ageratum conyzoides Chrysanthemum sp. Citrus limonia	January to March July, December, in flowers
SCARABAEIDAE		
Canthon viridis (Beauv.) Mallick	Theobroma cacao	April
Cycloce mala maffia Burn. San Pedro	Caladium bicolor Xanthosoma heleborii- folium	June Adults eat July flowers
Gymnetis liturata (Oliv.) Juan Vinas	Inga paterno	August
Macroductylus lineatus Chevr. San Jose	Citrus nobilis Citrus sinensis	Serious injury to flowers
Macroductylus suavis Bates	Chrysanthemum maximum Rosa sp.	
Macroductylus sylphis Bates	Ageratum conyzoides Chrysanthemum maximum	Citrus sinensis
Pachystethus micans (Burm.)	Citrus limonia	July
Pachystethus nitidula (Blanch.) El Pisote San Isidro de Coronado San Pedro San Rafael	Chrysanthemum maximum Fragaria chiloensis Pennisetum purpureum Zantedeschia aethiopi- ica	December May October September
Strigoderma rutelina Bates San Pedro	Beta vulgaris crassa Persea americana	January

Insect and locality	Collected on	Date and notes
STAPHYLINIDAE Philonthus feralis Erichs.	Chayota edulis	October
TEBERIONIDAE Lobometopon guatemalensis (Champ.) Paso Ancho	Ageratum conyzoides Amygdalus davidiana Annona cherimola Annona reticulata Asparagus officinalis Averrhoa carambola Boehmeria nivea Casimiroa edulis Crotalaria striata Cucurbita pepo Dianthus caryophyllus Dillenia indica Eriobotrya japonica Ficus carica	October to March eat July pollen and fungi
Schoenicus panamensis Champ.	Annona cherimola Asparagus officinalis Eamelia erecta Mangifera indica Theobroma cacao	January February May December
Strongylium permodicum Maklin Waldeck	Phaseolus vulgaris	April
RHYNCHOPHORA Anyptotactus exilis Boh.	Phaseolus vulgaris	November
Attelabus conicollis Sharp Paso Ancho	Psidium guajava	December

Insect and locality	Collected on	Date and notes
<i>Atelabus corvinus</i> Gyll. Waldeck	<i>Spondias mombin</i>	August
<i>Baris aerea</i> (Boh.) San Pedro	<i>Chrysanthemum</i> sp.	January
<i>Cleistolophus similis</i> (Chevr.) San Rafael	<i>Boehmeria nivea</i> <i>Chrysophyllum cainito</i> <i>Erythrina rubrinervia</i>	February June July, August
<i>Conotrachelus fulvescens</i> Champ. San Pedro	<i>Canarium odoratum</i> <i>Persea americana</i>	January February, October
<i>Conotrachelus perseae</i> Barber San Pedro	<i>Persea americana</i>	February, August, October, December
<i>Conotrachelus signatus</i> Kirsch. San Pedro	<i>Persea americana</i>	May
<i>Copturus perseae</i> Gunth. San Pedro	<i>Persea americana</i>	February March
<i>Eurhinus festivus</i> (F.)	<i>Citharexylum caudatum</i>	October
<i>Exophtthalmus jekeliani</i> (Waite) Juan Vinas Santiago Ciguirres Turrialba Waldeck	<i>Citrus limonia</i> <i>Citrus paradisi</i> <i>Citrus sinensis</i> <i>Coffea arabica</i> <i>Cupressus benthami</i> <i>Dahlia rosea</i>	July August August August August August
<i>Exophtthalmus scalptus</i> Champ. Guadalupe Tres Rios	<i>Coffea arabica</i> <i>Castanea sativa</i>	August September
	<i>Fragaria chiloensis</i> <i>Heliotropium</i> sp. <i>Hibiscus rosa-sinensis</i> <i>Musa sapientum</i> <i>Spondias purpurea</i>	Seriously damages coffee foliage

Insect and locality	C o l l e c t e d o n	Date and notes
Exophthalmus sulcicrus Gnapp. Liberia	Citrus sinensis Solanum sp.	July
Gerneus lentiginosus (Boh.)	Citrus medica Cyperus caracasanus Dahlia rosea Daucus carota Dianthus caryophyllus	October to March
Gerneus lineellus (Lec.) San Pedro	Impatiens balsamina	October
Gerneus senilis (Gyll.) Paso Ancho San Pedro Santiago	Zea mays	June Serious injury July to corn August
Heilius trifasciatus F. Sixaola	Persea americana	July Reared in seed Serious injury
Metamasius sericeus (Oliv.) San Lazaro San Pedro	Acrocomia vinifera Musa textilis	March September
Pantomorus femoratus Sharp. Alojuela	Zea mays	October
Phyrdorus divergens (Germ.) San Pedro	Lycopersicum esculentum	June
Rhinosiphia albomarginata Chev. San Jose San Pedro	Panicum barbinode Sacciarum officinarum	July August October

Insect and locality	Collected on	Date and notes
<i>Epididymus stigmaticus</i> (Fabræus) Liberia	Chayota edulis Saccharum officinarum	July
<i>Epididymus tridactylus</i> <i>graphicus</i> Champ. Rio Grande	Gramineae (grass)	February
<i>Steirarrhinus nebulosus</i> Champ.	Chayota edulis Passiflora edulis Randia mitis Zinnia elegans	May July, September

D I P T E R A

<i>Arctostreptus serpentina</i> (Wied.)	Lucuma mammosa	Chrysophyllum cainito	August	Larvae destroy the fruit
<i>Ctenorhynchus xanthoptera</i> Hondur San Pedro	Phaseolus vulgaris		October November	
<i>Carpolonychaea pendula</i> Bezzi Paraiso Paso Ancho San Pedro	Manihot esculenta		May August to tips by September larvae December	Serious injury
<i>Chrysops variegata</i> Deg. Pejivalle	Horses		February	
<i>Dermatobia hominis</i> (L.) Pejivalle San Pedro Simola	Man Cattle		January June	

Insect and locality	C o l l e c t e d o n	Date and notes
Dilophus melanarius V. d. Wulp Paraíso San José San Pedro San Rafael	Cosimiroa edulis Chrysanthemum maximum Cupressus benthami Mangifera indica Persea americana	January February June October December
Plecia aterrima Bell Sanatorio Duran	Solanum tuberosum	September
Rhynchosciara brevicornis Guer. San Rafael	Asparagus officinalis Averrhoa carambola Cosimiroa edulis Casuarina equisetifolia Hibiscus rosa-sinensis	January February August
Richardia podarica (F.) San Pedro Waldeck	Ipomoea batatas Mangifera indica Prunus salicina Rhododendron sp. Rosa sp. Saccharum officinarum	January February August
Richardia telescopica Gerst. Waldeck	Theobroma cacao	July September November December
Tetrameuresta obscuriventris Loew	Croton gossypifolium Eugenia uniflora Ligustrum japonicum	July April August

HOMOPTERA

Insect and Locality	Collected on	Date and notes
ALYDIDAE		
<i>Aleurocantus woglumi</i> Ashby San Jose Tres Rios	<i>Citrus sinensis</i> <i>Mangifera indica</i> <i>Persea americana</i>	Adults feed only on tender leaves of avocado.
<i>Aleuroclatys coadipreniformis</i> Quaint and Baker San Pedro	<i>Passiflora ligularis</i>	December
<i>Aleurotharix howardii</i> (Quaint.) Santo Domingo de Heredia Tres Rios	<i>Citrus medica</i> <i>Citrus nobilis</i> <i>Fortunella japonica</i>	October November January
APHIDIDAE		
<i>Aphis nerii</i> Boyer San Pedro	<i>Asclepias curassavica</i> <i>Hibiscus rosa-sinensis</i>	January, March, May, September
<i>Cerataphis lataniae</i> (Boisd.) San Pedro	<i>Roystonea regia</i>	December
<i>Macrosiphum rosae</i> (L.) Paso Ancho San Pedro Sarchi	<i>Rosa</i> sp.	December, February May
<i>Rhopalosiphum pseudobrassicae</i> (Davis) Granulape	<i>Brassica oleracea</i> <i>capitata</i> <i>Brassica pekinensis</i>	February March
	<i>Raphanus sativus</i>	

Insect and Locality	Collected on	Date and notes
Taxoptera aurantiae Boyer Tres Rios	Camellia japonica Citrus aurantifolia Citrus medica	Citrus paradisi Fortunella margarita
CERCOPIIDAE		
Cephus siccifolius (Walk.) San Antonio de Belen	Bidens pilosa Citrus sinensis	Gliricidia maculata
Clastoptera funesta Stal Florida Paso Ancho Waldeck	Musa sapientum Tabernaemontana coronaria Vernonia brachiata	April July August
Clastoptera obtusa (Say) Santa Ana	Guzmania ulmifolia	April
Epicranion championi Fowl.	Cestrum macrophyllum Ficus carica	January September
Tomaspis bicincta (Say) San Pedro	Chayote edulis Cucurbita pepo Paspalum notatum Zea mays	July October November
Tomaspis inca (Guer.) San Pedro	Zea mays	July
Tomaspis postica (Walk.) Juan Vinas Pejivalle San Pedro	Chrysanthemum maximum Malus sylvestris Panicum barbinode Panicum maximum	Phaseolus vulgaris Tropaeolum majus Zea mays

Insect and locality	Collected on	Date and notes
<i>Empoasca stictica</i> (Felt.) El Pisote	Gramineae (grasses)	September
CICADELLIDAE		
<i>Aceratagallia sordida</i> Oman San Pedro	<i>Ipomoea batatas</i>	April
<i>Agallia ingens</i> Oman San Pedro	<i>Chayote edulis</i>	August
<i>Agallia lingula</i> Van D. Paso Ancho San Pedro	<i>Cappiolo dictylon</i> <i>Coreopsis lanceolata</i> <i>Dahlia rosea</i>	December, January, February, April, August
<i>Agallia modesta</i> O. & B.* Jann. Vinas Paso Ancho San Pedro San Rafael Saroni	<i>Acnistus arborescens</i> <i>Cappiolo dictylon</i> <i>Chenopodium ambrosioides</i> <i>Clerodendron fragrans</i> <i>Coreopsis lanceolata</i> <i>Dahlia rosea</i>	<i>Datura stramonium</i> <i>Paspalum notatum</i> <i>Psidium molle</i> <i>Saccharum spontaneum</i> <i>Solanum tuberosum</i> <i>Tetragonia expansa</i> Throughout year
<i>Agallia novella</i> <i>tropicallis</i> Van D. Paraiso San Jose	<i>Acnistus arborescens</i> <i>Camellia japonica</i> <i>Chenopodium ambrosioides</i> <i>Grevillea robusta</i> <i>Hibiscus rosa-sinensis</i> <i>Ipomoea batatas</i> <i>Lippia berlandieri</i> <i>Lycopersicon esculentum</i>	<i>Pelargonium graveolens</i> <i>Pelargonium zonale</i> <i>Terminalia catappa</i> <i>Trifolium fragiferum</i> <i>Vernonia brevifolia</i> <i>Vicia faba</i> <i>Vicia minor</i> <i>Viola odorata</i> Throughout year

* This species was incorrectly listed as *Agallia modesta* O. & B. in the Insect Pest Survey Bulletin, supplement to Vol. 15, no. 4, p. 188, June 1935.

Insect and locality	Collected on	Date and notes
Agallia repleta Van D. Waldeck	Theobroma cacao	April
Agellus bisinuatus DeLong Sarchi	Capriola dactylon	January
Aulacizes panamensis Fowl. Juan Vinas	Anacardium rhinocarpus Cornutia cymosa Croton gossypifolium	October- December
Carneocephala sagittifera Uhli. La Caja Juan Vinas Paso Ancho San Rafael Santiago Sarchi	Dahlia rosen. Fragaria chilensis Viola tricolor	May August
Cicadella annita Fowl. Waldeck	Coix lacryma-jobi	April July
Cicadella areolata Sign. Alajuela Paso Ancho Paraiso San Jose Santiago Tres Rios	Acanthus arborescens Anacardium occidentale Agapanthus umbellatus Casimiroa edulis Cedrela montana mexi- cana Cestrum macrophyllum Citrus sinensis Cymbopogon citratus Dahlia rosen	Throughout year
	Ficus carica Fortunella japonica Grevillea robusta Mangifera indica Panicum barbinode Persen americana Phaseolus lunatus Poinsettia pulcher- rima Vernonia bracteata	

Insect and locality	C o l l e c t e d o n	Date and notes
Cicadella coeruleovittata Sign. El Pisote Paso Ancho Waldeck	<i>Ageratum conyzoides</i> <i>Beta vulgaris crassa</i> <i>Bidens pilosa</i> <i>Brassica japonica</i> <i>Brassica pekinensis</i> <i>Byrsonima crassifolia</i> <i>Caladium bicolor</i> <i>Coix lacryma-jobi</i> <i>Coleus blumei</i> <i>Colocasia esculenta</i> <i>Coreopsis lanceolata</i>	<i>Eugenia uniflora</i> <i>Hedychium coronarium</i> <i>Fragaria chiloensis</i> <i>Hibiscus rosa-sinensis</i> <i>Ipomoea batatas</i> <i>Ipomoea tiliacea</i> <i>Jacobinia coccinea</i> <i>Lactuca sativa</i> <i>Polygonum acre</i> <i>Raphanus sativus</i> <i>Solanum tuberosum</i>
Cicadella costaricensis Dist. El Pisote	<i>Vernonia brachiata</i>	September
Cicadella lativittata Fowl. Santiago	<i>Fragaria chiloensis</i>	August
Cicadella lutea Sign.	<i>Ficus religiosa</i> <i>Grevillea robusta</i>	<i>Psidium guajava</i> <i>Terminalia catappa</i>
Cicadella miniaticeps Fowl. Alajuela Juan Vinas La Caja Paso Ancho Pejivalle San Rafael Waldeck	<i>Acnistus arborescens</i> <i>Ageratum conyzoides</i> <i>Allamanda cathartica</i> <i>Baccharis nervosa</i> <i>Calyptanthus costaricensis</i> <i>Canna indica</i> <i>Capriola dactylon</i> <i>Capsicum annuum</i> <i>Cayote edulis</i> <i>Chenopodium ambrosioides</i>	<i>Coffea arabica</i> <i>Coix lacryma-jobi</i> <i>Crotalaria spectabilis</i> <i>Cynademium sp.</i> <i>Datura candida</i> <i>Daucus carota</i> <i>Dillenia indica</i> <i>Dovyalis hebecarpa</i> <i>Eugenia malaccensis</i> <i>Galinsoga hispida</i> <i>Jacaranda ovalifolia</i>
		Throughout year

Insect and locality	Collected on	Date and notes
Cicadella miniaticeps Fowl. - Cont'd.	Panicum barbinode Panicum maximum Phaseolus vulgaris Phytolacca octandra Pisum sativum Saccharum officinarum Scirpus molle Solanum tuberosum	Tabebuia guayanae Terminalia catappa Tetragonia expansa Thespesia populnea Tripsacum latifolia Vernonia brachiata Viola odorata
Cicadella mollicella Fowl. Sarchi	Capriola dactylon Panicum barbinode	April
Cicadella oecatoria (Say) San Rafael Sarchi Tres Rios	Bauvardia humboldtii Beta vulgaris crassa Brassica pekinensis Chenopodium ambrosioides Citrus sinensis Codium variegatum Crotalaria fulva Croton gossypifolium Cucurbita ficifolia Daucus carota Dombeya wallichii Eriobotrya japonica	Hibiscus rosa-sinensis Holcus sorghum Indigofera suffruticosa Ipomoea tiliaacea Lagenaria leucantha Musa sapientum Phaseolus lunatus Phytolacca octandra Piper auritum Poinsettia pulcherrima Radicula armorea Sapium acuparium Terminalia catappa Thespesia populnea Trifolium fragiferum
	Eucalyptus trachyphloia Fragaria chiloensis Gossypium barbadense Heliotropium peruvianum Hibiscus abelmoschus	

Insect and locality	C o l l e c t e d o n		Date and notes
<i>Cicadella pandalina</i> Fowl.	Duranta plumieri Erythrina rubrinervia Hibiscus rosa-sinensis Mangifera indica Melaleuca leucodendron	Persea americana Schinus molle Sterculia diversifolia	
<i>Cicadella pulchella</i> Guer. Juan Vinas Paraíso Pejivalle San Jose Santiago Sarchi	Ananas sativus Calea urticifolia axillaris Coffea arabica Heliotropium sp. Panicum barbinode Phaseolus vulgaris	Raphanus sativus Tetragonia expansa Zea mays	January February April August October
<i>Cicadella reservata</i> Fowl.	Asclepias curassavica Citrus sinensis Croton gossypifolium	Dahlia rosea Eugenia jambos	August
<i>Cicadella rufopunctata</i> Fowl. Waldeck	Theobroma cacao		April
<i>Cicadella satellas</i> Fowl.	Passiflora quadrangularis Spondias cythera	Tabernaemontana bigoniaeflora	August December
<i>Cicadella sexlineata</i> Sign. Juan Vinas San Rafael	Ageratum conyzoides Amaranthus spinosus Baccharis nervosa Beta vulgaris crassa Boehmeria nivea Calyptranthes costaricensis	Chayote edulis Chenopodium ambrosioides Cobea scandens Coleus blumei Cornutia cylosa Croton gossypifolium	

Insect and locality	C o l l e c t e d o n	Date and notes
Cicadella sexlineata Sign. - Cont'd.	Cucurbita ficifolia Cucurbita pepo Datura stramonium Daucus carota Dovyalis hebecarpa Eugenia malaccensis Ficus carica Hamelia erecta Hibiscus abelmoschus Hibiscus rosa-sinensis Impatiens balsamina	Ipomoea tiliacea Jacobinia coccinea Lippia berlandieri Malacra radiata Morus rubra Phaseolus vulgaris Pyrus communis Raphanus sativus Spondias purpurea Terminalia catappa Zea mays
Cicadella similis Walk. Paso Ancho San Rafael Sarchi	Artemisia absinthium Brassica japonica Byrsnima crassifolia Celba pentandra Cestrum aurantiacum Chayota edulis Cinnamomum camphora Coffea arabica Coix lacryma-jobi Crotalaria juncea Cupressus benthami Eschscholtzia californica Eugenia malaccensis Fragaria chiloensis Galinzoga hispida Gardenia florida Grevillea robusta Holcus sorghum Ipomoea batatas	February April October November
	Ipomoea tiliacea Iris laevigata Lactuca sativa Lippia berlandieri Morus rubra Phaseolus lunatus Psidium molle Rheedia sp. Saccharum officinarum Saccharum spontaneum Solanum tuberosum Solanum wendlandi Trifolium fragiferum Verbena sp. Vicia faba Viola odorata	

Insect and locality	Collected on	Date and notes
Cicadella testudinaria Fowl.	Asclepias curassavica Bauhinia monandra Calliandra grandiflora Calyptranthes costaricensis Citrus limonia Codiaeum variegatum Eugenia jambos Eugenia uniflora	July October November December
Cicadula maidis DeLong and Wolcott Paso Ancho	Chayote edulis	
Deltoccephalus flavicosta Stal	Capriola dactylon Hemerocallis sp.	January October
Deltoccephalus spinosus San Pedro Sarchi	Capriola dactylon	January February
Draeculacephala lenticula Ball: Jurn Vinas Rio Grande San Pedro Waldeck	Canna indica Capriola dactylon Coix lacryma-jobi Grevillea robusta Panicum barbinode	January to April August December
Draeculacephala soluta Gibs. San Pedro	Capriola dactylon Ipomoea batatas Lactuca sativa	January

Insect and locality	C o l l e c t e d o n	Date and notes
Empoasca perelegans Oman Paraíso Paso Ancho San Pedro	Annona cherimola Annona reticulata	January March August to December
Empoasca phaeola Oman San Pedro	Phaseolus lunatus Phaseolus vulgaris	April October to February
Exitianus picatus Gibs. Paso Ancho San Pedro Sarchi	Capriola dactylon Paspalum notatum	October December - February
Graphocephala coccinea (Forst.) Juan Vinas Paso Ancho San Jose Sarchi	Acnistus arborescens Allamanda cathartica Boehmeria nivea Bombax ellipticum Canarium odoratum Carissa grandiflora Cinnamomum camphora Citrus aurantium Citrus limonia Citrus paradisi Citrus sp. (toronjo) Clerodendron fragrans Coix lacryma-jobi Congea velutina Cupressus benthami Cytisus fragrans Dahlia rosea Datura candida	Duranta plumieri Ficus carica Fortunella japonica Fortunella margarita Grevillea robusta Impatiens balsamina Jacobinia coccinea Jatropha aconitifolia Ligustrum japonicum Melaleuca leucadendron Pelargonium zonale Persea pittieri Plumeria rubra Spondias cytheroea Sterculia diversifolia Tabebuia pentaphylla Terminalia catappa Thunbergia erecta

Insect and locality	C o l l e c t e d o n	Date and notes
Graphocephala sanguinolenta Coqueb. Waldeck	Musa sapientum Theobroma cacao	April July
Graphocephala rufimargo Walk. San Rafael Santiago Sarchi	Abutilon sp. Capriola dactylon Zea mays	January February August
Graphocephala limbaticollis Stal Paraíso Paso Ancho San Jose Tres Rios	Acnistus arborescens Asclepias curassavica Canarium odoratum Citrus limonia Colocasia esculenta Croton gossypifolium Dombeya wallichi Erythrina rubrinervia	October
Graphocephala versuta (Say)	Citrus aurantium Eucalyptus trachypholia Eugenia jambos Fortunella japonica Hibiscus rosa-sinensis Hymenaea courbaril	Inga edulis Inga laurina Ligustrum japonicum Stereulia diversifolia Verbesina turbacensis
Gypona praeterita Fowl. Desamparados Waldeck	Elaeis guineensis Galinzoga hispida	July October
Gypona puncticollis Spangb. San Pedro	Panicum barbinode	April

Insect and locality	C o l l e c t e d o n	Date and notes
Gypona vinula Stal San Pedro	Acnistus arborescens Panicum barbinode	August
Gypona signoreti Stal El Pisote San Pedro	Hamelia erecta	November
Gypona vulnerata Walk. Tres Rios	<p>Acnistus arborescens Ageratum conyzoides Albizia lophantha Alnus acuminata Annona muricata Baccharis nervosa Bixa orellana Byrsonima crassifolia Calliandra grandiflora Callistemon lanceo- latus Canarium odoratum Castanea sativa Cestrum lanatum Chayota edulis Cinnamomum camphora Citrus aurantifolia Citrus medica Croton gossypifolium</p>	January
Kolla fasciata (Walk.)	<p>Ageratum conyzoides Panicum barbinode Thespesia populnea</p>	<p>Duranta plumieri Eriobotrya japonica Eucalyptus trachypho- ia Ficus religiosa Fortunella japonica Grevillea robusta Malus sylvestris Melaleuca leucaden- dron Pelargonium zonale Phaseolus lunatus Prunus salicina Pyrus communis Rosa sp. Solanum torvum Spondias cytherea</p>

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Keila geometrica</i> (Sign.)	<i>Cleome spinosa</i> <i>Croton gossypifolium</i> <i>Grevillea robusta</i> <i>Nedychium coronarium</i> <i>Musa sapientum</i>	<i>Sapium</i> sp. <i>Solanum aculeatissimum</i> <i>Solanum tuberosum</i> <i>Tabebuia guayacan</i>
<i>Oncometopia undata</i> (F.) Alajuela Juan Vinas Paraiso Sarcni	<i>Citrus aurantium</i> <i>Citrus limonia</i> <i>Cocos nucifera</i> <i>Dahlia rosea</i> <i>Eugenia malaccensis</i> <i>Heliantus annuus</i>	<i>Hibiscus sabdariffa</i> <i>Lantana trifolia</i> <i>Passiflora edulis</i> <i>Pelargonium zonale</i> <i>Rosa</i> sp.
<i>Ostornellus mexicanus</i> Osb. Paso Ancho San Pedro	<i>Annona cherimola</i> <i>Capriola dactylon</i> <i>Chayota edulis</i> <i>Coreopsis lanceolata</i> <i>Cosmos sulphureus</i> <i>Gomphrena globosa</i> <i>Ipomoea batatas</i> <i>Ipomoea tiliacea</i>	<i>Parkinsonia aculeata</i> <i>Pelargonium zonale</i> <i>Persea americana</i> <i>Phaseolus lunatus</i> <i>Phaseolus vulgaris</i> <i>Tournefortia foetidisima</i> <i>Vinca rosea</i>
<i>Phera obtusifrons</i> Fowl. San Pedro	<i>Calistemon lanceolatus</i> <i>Carissa grandiflora</i> <i>Coix lacryma-jobi</i>	<i>Hibiscus rosa-sinensis</i> <i>Saccharum officinarum</i> <i>Zea mays</i>
<i>Platymetopius frontalis</i> Van D. Paraiso Paso Ancho San Jose San Pedro Waldeck	<i>Acnistus arborescens</i> <i>Amaranthus paniculatus cruentus</i> <i>Calyptanthus costaricensis</i> <i>Capsicum annuum</i>	<i>Cinnamomum camphora</i> <i>Cissus sicyoides</i> <i>Citrus sinensis</i> <i>Clerodendron fragrans</i> <i>Crotalaria spectabilis</i>

Throughout year

March
July to December

Throughout year

Insect and locality	C o l l e c t e d o n	Date and notes
Platymetopius frontalis Van D. - Cont'd.	<p>Cyclanthera pedata Dahlia rosea Datura candida Dombeya wallichii Ficus carica Galinzoga hispida Gomphrena globosa Grevillea robusta Guarea caoba Hibiscus rosa-sinensis Impatiens balsamina Ipomoea tiliacea Jacaranda ovalifolia Lagenaria leucantha Malacra radiata Persea americana Phaseolus vulgaris</p> <p>Vernonia brachiata</p> <p>Panicum barbinode</p> <p>Chayota edulis Pennisetum clandestinum</p> <p>Capriola dactylon Paspalum notatum</p>	<p>Throughout year</p>
Protalebra decrata San Pedro		March, April, October to January
Spanbergiella mexicana Bak. San Pedro		April
Stirellus bicolor (Van D.) Barba El Pisote San Pedro		October November
Thamnotettix comatus (Ball) Juan Vinas Paso Ancho San Pedro Sarchi		August October December to February

Insect and locality	Collected on	Date and notes
<i>Thamnotettix fasciaticollis</i> (Stal) ? San Pedro San Rafael	<i>Annona squamosa</i> <i>Brassica japonica</i> <i>Caesalpinia pulcherrima</i> <i>Capriola dactylon</i> <i>Casimiroa edulis</i> <i>Cedrela montana mexicana</i> <i>Cestrum lanatum</i> <i>Cestrum macrophyllum</i> <i>Citharexylum caudatum</i> <i>Citrus aurantium</i> <i>Citrus limonia</i> <i>Citrus nobilis</i> <i>Crotalaria spectabilis</i>	August to March May
<i>Xestocephalus tessellatus</i> Van D. San Pedro San Rafael	<i>Cucurbita pepo</i> <i>Dombeya wallichi</i> <i>Ficus religiosa</i> <i>Hibiscus rosa-sinensis</i> <i>Ligustrum japonicum</i> <i>Lippia berlandieri</i> <i>Phytolacca octandra</i> <i>Pisum sativum</i> <i>Saccharum officinarum</i> <i>Solanum tuberosum</i> <i>Tetragonia expansa</i> <i>Vicia faba</i>	February April
COCCIDAE <i>Asterolecanium bambusae</i> Boisd. San Isidro del General	<i>Panicum barbinode</i> <i>Tripsecum latifolia</i>	August
<i>Aulacaspis pentagona</i> (Targ.)	<i>Bambusa sp.</i> <i>Amegdalu davidiana</i> <i>Schinus molle</i>	<i>Chilocorus cacti</i> L. is predacious on this scale.

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Ceroplastes floridensis</i> Comst. Alajuela San Pedro San Rafael	<i>Beaumontia grandiflora</i> <i>Casimiroa edulis</i> <i>Citrus aurantium</i> <i>Citrus limonia</i> <i>Citrus nobilis</i> <i>Cydonia oblonga</i>	<i>Ficus religiosa</i> <i>Guarea caoba</i> <i>Nephrolepis</i> sp. <i>Persea americana</i> <i>Plumeria rubra</i>
<i>Chrysomphalus dictyospermi</i> (Morg.)	<i>Garcinia tinctoria</i>	February August
<i>Coccus acuminatus</i> (Sign.) Paso Ancho Tres Rios	<i>Gardenia florida</i> <i>Ixora chinensis</i>	August September December
<i>Coccus hesperidum</i> (L.) San Miguel del Sur de Santo Domingo de Heredia	<i>Achyranthes aspera</i> <i>Carissa grandiflora</i> <i>Chamaedora bifurcata</i> <i>Citrus mitis</i> <i>Citrus nobilis</i> <i>Diospyros virginiana</i>	April August October December to February
<i>Coccus viridis</i> (Green) San Isidro del General	<i>Citrus sinensis</i>	August
<i>Eriococcus araucariae</i> Mask. San Pedro Tres Rios	<i>Araucaria excelsa</i>	May September
<i>Hemichionaspis aspidistrae</i> (Sign.) Limón San Pedro	<i>Nephrolepis</i> sp.	March May Serious injury to ferns

Insect and locality	C o l l e c t e d o n	Date and notes
Icerya montsorrattensis Riley and Howard San Pedro	Cyphomandra betacea	November
Ischnaspis longirostris (Sign.) Tres Rios	Chrysalidocarpus lutescens	September
Lepidosaphes beckii (Newm.)	Citrus aurantium Citrus limonia	Almost completely controlled by fungus <u>Sphaero-stilbe coccophila</u> .
Orthezia insignis Dougl. San Rafael	Ruta graveolens Solanum pseudocapsicum	January February, June
Pseudischnaspis bowreyi (Ckll.)	Hicoria pecan Prunus salicina	January February, June Serious injury to Sterculia and ocean
Pseudococcus citri (Risso)	Citrus trifoliata Fortunella japonica Persen americana	January March April
Pseudococcus nipae (Mask.)	Anacardium occidentale	October
Pseudococcus virgatus (Ckll.) San Pedro	Althaea rosea	December
Pulvinaria psidii Mask. San Rafael	Garcinia tinctoria Phyllanthus angustifolia	Plumeria rubra
Rhizococcus coffeae Irving Sabanilla	Coffea arabica	November Serious damage

Insect and locality	C o l l e c t e d o n	Date and notes
Colpoptera sp. San Rafael Sarchi Waldeck	<p> Acnistus arborescens Ageratum conyzoides Begonia sp. Blakea gracilis Buddleia davidi Caladium bicolor Cattleya skinneri Cestrum aurantiacum Cestrum nocturnum Chenopodium ambrosioides Citrus aurantifolia Citrus sinensis Coleus blumei Congea velutina Cucurbita pepo Cupressus benthami Datura candida Datura stramonium Dieffenbachia sp. Eriobotrya japonica Eugenia uniflora Ficus carica Fragaria chiloensis Theobroma cacao </p>	<p> Hamelia erecta Hibiscus esculentus Impatiens sultani Ipomoea tiliacea Jacobinia coccinea Lycopersicum esculentum Myosotis sylvatica Passiflora quadrangularis Persea americana Petunia hybrida Poinsettia pulcherrima Raphanus sativus Ricinus communis Salvia splendens Solanum muricatum Solanum nigrum Solanum seaforthianum Theobroma cacao Tropaeolum majus Zea mays </p> <p> July </p>
Colpoptera sinuata Burm. Waldeck	<p> Acnistus arborescens Ageratum conyzoides Croton gossypifolium </p>	<p> Hibiscus rosa-sinensis Rumex crispus Tournefortia foetida dissimulans </p> <p> March August September </p>
Copicerus irroratus Swartz San Pedro		

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Cotyleceps maculata</i> Fowl. Waldeck	Theobroma cacao	April
<i>Delphacodes nigra</i> Crawford. San Pedro	Gramineae (grass)	February
<i>Delphacodes nigrifacies</i> Muir Juan Vinas San Pedro	Gramineae (grass)	August October
<i>Delphacodes propinqua</i> Fieb. San Pedro Sarchi	<i>Capriola dactylon</i> <i>Galinzoga hispida</i>	January February
<i>Liburnia teapae</i> Fowl. San Pedro	<i>Coleus blumei</i> Gramineae (grass)	February
<i>Dictyophara herbida</i> (Walk.) Waldeck	<i>Elaeis guineensis</i> Theobroma cacao	July
<i>Dictyophara obtusifrons</i> (Walk.) Rio Grande	Gramineae	February
<i>Epibidius godmani</i> Fowl. Waldeck	Theobroma cacao	July
<i>Flatoides humeralis</i> Walk. Guadalupe San Pedro	<i>Amygdalus persica</i> <i>Citrus limonia</i> <i>Croton gossypifolium</i>	February April December
<i>Gaetulia plenipennis</i> (Walk.) Waldeck	Theobroma cacao	July

Insect and Locality	Collected on	Date and notes
<i>Oecleus addendus</i> Fowl. Juan Vinas	<i>Coffea arabica</i>	August
<i>Peregrinus maidis</i> (Ashm.) San Pedro	<i>Zea mays</i>	August
<i>Sogata furcifera</i> Horv. San Pedro	<i>Phaseolus vulgaris</i>	October
MEMBRACIDAE		
<i>Aconophora nitida</i> Fowl. Juan Vinas	<i>Coffea arabica</i>	May August
<i>Aconophora pallescens</i> Stal La Caja Pejivalle San Rafael	<i>Acnistus arborescens</i> <i>Amygdalus persica</i> <i>Boehmeria nivea</i> <i>Calyptanthus costaricensis</i> <i>Canarium odoratum</i> <i>Cestrum macrophyllum</i> <i>Dovyalis hebecarpa</i> <i>Eugenia uniflora</i>	<i>Ficus religiosa</i> <i>Fortunella japonica</i> <i>Grevillea robusta</i> <i>Hicoria pectan</i> <i>Lagerstroemia indica</i> <i>Parkinsonia aculeata</i> <i>Prunus armeniaca</i> <i>Pyrus communis</i>
<i>Acutalis fusconervosa</i> Fairm. Paso Ancho Turrialba	<i>Dahlia rosea</i> <i>Musa sapientum</i>	July August
<i>Aethalion reticulatum</i> (L.)	<i>Bauhinia purpurea</i> <i>Fortunella japonica</i> <i>Grevillea robusta</i> <i>Jacaranda ovalifolia</i>	March August October

Insect and locality	C o l l e c t e d o n	Date and notes
Alchisme grossa (Fairm.) San Pedro	Coffea arabica Inga tonduzii	July October
Amastris obtegens (F.) Waldeck	Theobroma cacao	July
Antianthe expansa (Germ.) Paraíso San Rafael	Cestrum nocturnum Ipomoea batatas Verbesina turbacensis	
Bolbonota inaequalis (Fairm.) Juan Vinas Paraíso Santiago Siquirres Turrialba Waldeck	Acalypha hispida Alnus acuminata Amygdalus persica Anacardium rhinocarpus Annona muricata Bauhinia purpurea Byrsonima crassifolia Casimiroa edulis Cassia sophora Cestrum macrophyllum Cestrum nocturnum Citrus aurantifolia Citrus nobilis	Conostegia lanceolata Garcinia tinctoria Grevillea robusta Hibiscus rosa-sinensis Inga edulis Lagerstroemia speciosa Piper auritum Rheedea sp. Spondias cytherea Theobroma cacao Thespesia populnea Verbesina turbacensis Vernonia brachiata
Bolbonota insignis Fowl. Alajuela La Caja Paso Ancho San Francisco de Dos Rios San Jose	Acalypha hispida Acalypha wilkesiana Aenistus arborescens Anacardium occidentale Annona cherimola Annona muricata	December

Insect and locality	C o l l e c t e d o n	Date and notes
Bolbonota insignis Fowl.- Cont'd.	Codineum variegatum Cynedemum sp. Dahlia rosea Dovyalis hebecarpa Lagerstroemia speciosa Spondias cytherea	Spondias purpurea Tamarindus indica Thespesia populnea Vernonia brachiata Zea mays
Campylocentrus hamifer (Fairm.) Guadalupe	Coffea arabica Gonolobus edulis	Petiveria alliacea February, June, October, November
Campylocentrus pusillus (Fairm.) El Pisote San Pedro Tres Rios	Cucurbita ficifolia Cucurbita pepo Gramineae (grass)	Ipomoea tiliacea Zea mays January July September
Ceresa testacea Fairm. Paraíso Paso Ancho San Pedro San Rafael	Amygdalus persica Celosia cristata Cupressus benthami Dahlia rosea Erythrina rubrinervia	Musa sapientum Parkinsonia aculeata February April July to September
Ceresa vitulus (F.) San Pedro	Chayota edulis Ipomoea tiliacea	Ipomoea purga February March, October
Ceresa vitulus minor Fowl. Juan Vinas Waldeck	Elaeis guineensis Erythrina glauca	July
Cyphonia clavata (F.) Waldeck	Theobroma cacao	July
Encheropa binotata (Say) San Pedro	Amygdalus persica Annona squamosa Bauhinia purpurea	Bauhinia violacea Cestrum macrophyllum Citrus nobilis X C. paradisi January February, April May, August, September, November, December

Insect and locality	Collected on	Date and notes
Enchenopa binotata (Say) - Cont'd.	Cydonia oblonga Diphyse robinoides Erythrina rubrinervia Eugenia uniflora	Hymenaea courbaril Malus sylvestris Melilotus alba Parkinsonia aculeata
Enchenopa lanceolata (Stoll) San Rafael	Annona muricata Conostegia lanceolata	December
Enchophyllum dubium Fowl. San Pedro	Persea americana	May
Entylia sinuata (F.) Paraiso San Rafael	Aenistus arborescens Ageratum conyzoides Beta vulgaris crassa Capriola dactylon Cedrela montana mexicana Cestrum macrophyllum Chayota edulis Clerodendron fragrans Datura candida Daucus carota Eriobotrya japonica	January August
Erechtia sallupei (Fowl.) Alajuela	Byrsonima crassifolia Canarium odoratum	Persea americana
Horiola arcuata (F.) Juan Vinas Waldeck	Coffea arabica Theobroma cacao	April May
Horiola composita Walk. Waldeck	Theobroma cacao	July

Insect and locality	Collected on	Date and notes
<i>Meriopa picta</i> (Coque.) Santiago Turrialba	<i>Cassia spectabilis</i> <i>Citrus limonia</i> <i>Eugenia jambos</i>	July August
<i>Meloboris mexicana</i> Guer. Santa Ana Siquirres	<i>Acalypha wilkesiana</i> <i>Alnus acuminata</i> <i>Bauhinia monandra</i> <i>Bauhinia violacea</i> <i>Bysonima crassifolia</i> <i>Cestrum macrophyllum</i> <i>Chrysophyllum cainito</i> <i>Codiaeum variegatum</i> <i>Crotalaria striata</i> <i>Cupressus benthami</i> <i>Enterolobium cyclocarpum</i>	Causes considerable damage by oviposition
<i>Microtalis ephippium</i> (Burn.) San Pedro	<i>Anacardium paniculatus</i> cruentus <i>Anacardium spinosus</i>	January March to May
<i>Microtalis lugubrina</i> (Stal.) San Pedro	<i>Cornutia cynosa</i>	March
<i>Potnia brevicornis</i> Fowl. San Pedro	<i>Xylosma</i> sp.	August, October, December
<i>Pterygia bituberculata</i> Fowl. La Caja	<i>Coffea arabica</i>	May
<i>Spongophorus ballista</i> (Germ.) Gundalupe	<i>Chayota edulis</i> <i>Coffea arabica</i> <i>Crotalaria striata</i>	January, June, July, August, December

Insect and locality	C o l l e c t e d o n	Date and notes
Stictoccephala festina (Say) Faso Ancho San Rafael	Amygdalus persica Annona reticulata Beta vulgaris crassa Capriola dactylon Cassia sp. Dahlia rosea Fragaria chiloensis Galinzoga hispida Grevillea robusta Ipomoea tiliacea Lippia berlandieri Melaleuca leucaden- dron	March August October November
Umbonia crassicornis (Amy. and Serv.) Aserries Santa Ana	Guazuma ulmifolia Inga laurina Inga spuria Inga tonduzii	February April August
Vanduzeeae segmentata (Fowl.) San Pedro Santa Ana Santiago Siquirres Waldeck	Acalypha wilkesiana Bauhinia monandra Bauhinia violacea Cassia sophora Cupressus benthami Mimosa asperata	April Very harmful to July <u>Cassia sophora</u> August December

H E M I P T E R A

Acanthocephala bicoloripes (Stal) Waldeck	Theobroma cacao	July
Acanthocephala declivis guate- malena Dist.	Annona muricata Fortunella margarita	

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Acroleucus brevicollis</i> (Stal) San Pedro	<i>Canarium odoratum</i>	August
<i>Acrosternum marginatum</i> (Beauv.) San Pedro	<i>Zea mays</i>	September
<i>Alloccoris elegans</i> McA. & M. Paso Ancho	<i>Dahlia rosea</i>	August
<i>Anasa andresii</i> (Guer.) San Jose	<i>Chayota edulis</i> <i>Cucurbita ficifolia</i> <i>Dahlia rosea</i>	<i>Thecvetia neriifolia</i> January July
<i>Anasa madida</i> Dist. San Pedro	<i>Acnistus arborescens</i> <i>Persea americana</i>	February December
<i>Anasa bellator</i> (F.) Waldeck	<i>Elaeis guineensis</i>	July
<i>Anasa scorbutica</i> (F.) San Jose	<i>Amygdalus persica</i> <i>Chayota edulis</i>	<i>Dahlia rosea</i> July September
<i>Castolus plagiaticollis</i> Stal San Rafael Waldeck	<i>Theobroma cacao</i> <i>Panicum barbinode</i>	February April
<i>Cebrenis modesta</i> Dist. San Pedro	<i>Vernonia brachiata</i>	March
<i>Charicsterus moestus</i> Burn. Santa Ana	<i>Pedilanthus tithymal-</i> <i>oides</i>	April
<i>Caloreccoris aberrans</i> Dist. San Pedro	<i>Citrus sinensis</i>	March

Insect and locality	C o l l e c t e d o n	Date and notes
Collaria oleosa Dist. El Pisote San Rafael Turrialba	Ageratum conyzoides Chayota edulis Coffea arabica Coix lacryma-jobi	Pennisetum purpureum Phaseolus lunatus Saccharum officinarum Saccharum spontaneum
Corecoris fusca (Thunb.) San Jose San Pedro	Ageratum conyzoides Chayota edulis Coffea arabica	April to October
Corizus hyalinus (F.) San Pedro	Lactuca sativa	February
Corizus pictipes (Stal) San Pedro	Hibiscus rosa-sinensis Malacra radiata	February July
Corizus sidae F. Waldeck	Theobroma cacao	July
Cosmopepla coerulea Montd. San Jose	Daucus carota Ipomoea sp.	January August, October
Creontiades rubrinervus (Stal) San Jose	Asparagus officinalis Chayota edulis Cupressus benthami Cucurbita pepo	August October
Cyrtocapsus calligineus (Stal) San Pedro	Ipomoea batatas Ipomoea tiliacea	January April
Debilis angustata Champ. Waldeck	Theobroma cacao	July
Dysdercus flavolimbatus Stal Waldeck	Sida rhombifolia	July

Insect and locality	C o l l e c t e d o n		Date and notes
Dysdercus mimulus Hussey San Pedro San Rafael	Chayota edulis Ipomoea batatas Myosotis sylvatica	Nephrolepis sp.	February to April October
Dysdercus obliquus (H. S.) Desamparades	Acalypha wilkesiana Boehmeria nivea Datura candida Dombeya wallichii Gallinzoga hispida	Hibiscus abelmoschus Impatiens balsamina Malacra radiata Malus sylvestris Morus rubra	June, Important injury September, to <u>Hibiscus</u> to <u>abelmoschus</u> December
Dysdercus oncopeltus Dist. Liberia	Saccharum officinarum		February
Ecritotarsus pallidirostris Stal San Pedro	Ipomoea tiliacea		January
Edessa cornuta Burm. El Pisote San Jose Santiago	Acnistus arborescens Brassica japonica Brassica rapa Chayota edulis Citrus limonia	Cucurbita moschata Passiflora edulis Passiflora ligularis Ricinus communis Zea mays	June July September
Edessa junix Stal San Pedro	Erythrina rubrinervia		October
Edessa nigrispina Dallas Las Juntas de Abangares	Oryza sativa		
Edessa rufomarginata (De S.) San Lazaro	Sida rhombifolia		March

Insect and locality	C o l l e c t e d o n	Date and notes
Hypselonotus atratus Dist. Juan Vinas Pejivalle San Rafael Santiago	Chrysanthemum maximum Colocasia esculenta Crotalaria striata Cupressus benthami Impatiens balsamina Inga paterno Melanthera aspera	August October
Hypselonotus loratus Bredd. Waldeck	Sida rhombifolia	July
Ischnodemus sallaei (Sign.) San Pedro Paso Ancho	Canna indica	August to December
Lampethusa anatina Dist. San Pedro	Chayota edulis	August
Leptocorisa tipuloides (Deg.) San Jose	Annona cherimola	August
Leptoglossus stigma (Hbst.)	Citrus nobilis Cyphomandra batavea	February to May
Leptoglossus zonatus (Dallas) Paraiso San Jose Santiago Sarchi	Asparagus officinalis Chayota edulis Citrus aurantium Cupressus benthami Datura stramonium	Helianthus annuus Malus sylvestris Poinsettia pulcherrima Vigna sesquipedalis
Ligyrocoris litigious (Stal) San Pedro	Averrhoa carambola Fragaria chiloensis	January May

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Ligyrocoris multispinus</i> Stal San Pedro	<i>Ligustrum japonicum</i> <i>Phaseolus vulgaris</i>	January October
<i>Lygaeus bistrigularis</i> Say Barba	<i>Annona squamosa</i> <i>Pennisetum clandestinum</i>	November
<i>Lygaeus reclivatus</i> Say	<i>Asclepias curassavica</i>	April
<i>Lygaeus uhleri</i> Stal San Pedro	<i>Zea mays</i>	July
<i>Lygus sellaei</i> Stal San Pedro San Rafael	<i>Annona reticulata</i> <i>Beta vulgaris crassa</i> <i>Datura suaveolens</i> <i>Galinzoga hispida</i>	Hibiscus rosa-sinensis December to April
<i>Mecistorhinus tripterus</i> (F.) Siquirres Waldeck	<i>Hibiscus rosa-sinensis</i> <i>Theobroma cacao</i>	July
<i>Monanthia monotropidia</i> Stal La Caja	<i>Cassia spectabilis</i>	May
<i>Mormidea notulata</i> (H. S.) Gadalupe San Pedro San Rafael	<i>Chayota edulis</i> <i>Coffea arabica</i> <i>Panicum barbinode</i> <i>Zea mays</i>	February Injurious to corn July to October
<i>Myodocha unispinosa</i> Stal Waldeck	<i>Theobroma cacao</i>	April

Locality	Collected on	Date and notes
Neurocolpus mexicanus Dist. San Pedro	Myosotis sylvatica Vicia faba	January
Nezara viridula (L.)	Bixa orellana Chayota edulis Crotalaria striata Lippia berlandieri	January March
Nysius californicus Stal San Pedro	Tetragonia expansa Galinsoga hispida	January May
Nysius ementitus Dist. San Pedro Santa Lucia	Ageratum conyzoides Lippia berlandieri	January February December
Orthaca bilobata (Say) Paso Ancho San Pedro	Chayota edulis Dahlia rosea Zea mays	June August
Ortholomus jamaicensis Dallas San Pedro	Tetragonia expansa	May
Pachycoris torridus (Scop.) Guadalupe	Annona cherimola Coffea arabica Croton gossypifolium Eriobotrya japonica Erythrina rubrinervia	February March August
Padacus viduus (Voll.) San Pedro San Rafael	Chayota edulis Hibiscus rosa-sinensis	February October

Insect and locality	C o l l e c t e d o n	Date and notes
Pangaecus piceatus Stal San Pedro	Casuarina equisetifolia Coffea arabica Colocasia esculenta	January June October
Paracalocoris annulatus Dist.	Amygdalus persica Chayota edulis Citrus limonia Diospyros virginiana	January
Paracalocoris jurgiosus (Stal) San Pedro	Chayota edulis	July to September
Paracalocoris molliculus Dist. San Pedro	Fortunella japonica Gerbera jamesoni Persea americana	January December
Piesma cinerea (Say) San Pedro	Amaranthus spinosus	April
Platycarenum humilis (H.S.) Waldeck	Theobroma cacao	July
Platytylellus latipennis (Stal) Grecia San Pedro	Gramineae (grass) Hibiscus rosa-sinensis	February August
Polymerus cuneatus (Dist.)	Amaranthus paniculatus cruentus Amaranthus spinosus	January March April
Proxys punctulatus (Beauv.) San Pedro	Verbesina turbacensis	March
	Chenopodium ambrosioides Phaseolus vulgaris	

Insect and locality	Collected on	Date and notes
Proxys victor (F.) Waldeck	Theobroma cacao	April
Pycnoderes atratus (Dist.) San Pedro	Phaseolus vulgaris	October
Pycnoderes incurvus (Dist.) Paraiso	Chayota edulis Chrysophyllum cainito	January
Repipta flavicans (Amy. & Serv.) Waldeck	Theobroma cacao	April
Repipta taurus (F.) Waldeck	Theobroma cacao	July
Spilictyrtus longirostris Dist. San Pedro	Costus sanguineus	January
Staluptus marginalis Burm. San Jose San Pedro	Poinsettia pulcherrima Vernonia brachiata	February September to December
Stenomacra marginella (H.S.)	Amygdalus davidiana Camellia japonica Canarium odoratum Cestrum marginellae Chalcas exotica Chayota edulis Citharexylum caudatum Congea velutina Croton gossypifolium Datura candida Dombeya wallichii Eugenia uniflora Ficus carica	Fortunella japonica Galinzoga hispida Grevillea robusta Hamelia erecta Heliotropium indicum Hibiscus rosa-sinensis Hicoria pecan Ipomoea batatas Lucuma mammosa Melaleuca leucadendron Piper auritum Terminalia catappa Zea mays

Insect and locality	C o l l e c t e d o n	Date and notes
Zicca taeniola (Dallas) San Jose San Pedro	Amaranthus paniculatus cruentus Amaranthus spinosus Brassica oleracea capitata	January April July to September

H Y M E N O P T E R A

Augochlora seminigra Ckll. Waldeck	Theobroma cacao	July
Bephrata maculicollis Cam. San Pedro Waldeck	Annona cherimola Annona muricata	July A chalcid attacking seed and ruining the fruit
Ectatomma ruidum Roger Waldeck	Theobroma cacao	April July
Gyanopolybia sulfureofasciata Buckl. San Pedro	Annona cherimola Byrsonima crassifolia Cupressus benthami Hedychium coronarium	December Gather tomentum from leaves of January variety of plants. February November
Halictus pseudotegularis Ckll. Waldeck	Theobroma cacao	July
Megalopta idalia Smith Waldeck	Theobroma cacao	July

Insect and locality	Man	C o l l e c t e d o n	Date and notes
Polistes major Beauv. San Lazaro	Man	Ageratum conyzoides	March This wasp inflicts serious sting, causing difficulty in breathing
Ehopalictus lachnes Bachal San Pedro	Ageratum conyzoides		January
Solenopsis geminata (F.) Siquirres	Bauhinia purpurea Carissa grandiflora Cassia sophora Cestrum macrophyllum Citrus trifoliata Diospyros virginiana	Lagerstromia speciosa Mamea americana Polianthes tuberosa Taraxacum officinale	July to February May Fosters Vanduzee's segmentata Fowl., and various coccids.
Spilochalcis femorata (F.) Waldeck	Theobroma cacao	Theobroma cacao	July
Tetralix totus (Cuvier) San Pedro San Rafael	Citrus medica Tripsacum latifolia		February
Trigona amalthea (Oliv.) Alajuela Waldeck	Byrsonima crassifolia Elaeis guineensis		July October
Trigona cupira Smith Waldeck	Citrus limonia Eschscholtzia californica	Myosotis sylvatica Nicotiana glauca Theobroma cacao	January March April, July
Trigona townsendi Ckll. Pejivalle	Man		February A sweet bee

LEPIDOPTERA

Insect and locality	Collected on	Date and notes
<i>Acraga con Schaus</i> San Pedro	<i>Citrus nobilis</i> x para- disi	January August
<i>Appropotos melantho</i> (Bates) San Jose	<i>Cyphomandra betacea</i>	August
<i>Automeris boucardi</i> Druce San Rafael	<i>Coffea arabica</i> <i>Trema micrantha</i>	Larva attacked by the wasps <u><i>Gynopolobia sul-</i></u> <u><i>fureofasciata</i> Buckl.</u> and <u><i>Parachartergus apicalis</i> (F.)</u>
<i>Bertholdia specularis</i> (H.S.) Guadalupe	<i>Coffea arabica</i> <i>Psidium guajava</i>	February March
<i>Diaphania nitidalis</i> (Stoll) Coyolar San Pedro	<i>Cucumis sativus</i> <i>Cucurbita pepo</i>	February A very serious December pest of melons
<i>Dicentria sabella</i> San Pedro	<i>Lagerstroemia speciosa</i>	March Serious damage to April queen crapemyrtle November, December
<i>Dicentria violascens</i> (H.S.)	<i>Dombeya wallichii</i> <i>Hicoria pecan</i>	December Defoliating trees January
<i>Eantis pallida</i> (Feld.)	<i>Citrus medica</i> <i>Citrus nobilis</i> X para- disi	
<i>Euchaetes mitis</i> Schaus San Pedro	<i>Gonolobus edulis</i>	March, May, June, December, January

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Euglyphis castalia</i> (Druck) San Pedro	Person americana	April
<i>Euglyphis melancolica</i> (Eutl.)	Phoebe tonduzii	September
<i>Gloveria balloui</i> Schaus San Pedro	<i>Conostegia lanceolata</i> <i>Psidium guajava</i>	December January
<i>Halisidota schausi</i> Rothsch. San Pedro	<i>Morus rubra</i>	November
<i>Hemerocampa costaricensis</i> Schaus	<i>Cydonia oblonga</i> <i>Malus sylvestris</i> <i>Persea pittieri</i>	September to March Rosa sp.
<i>Licnophora cavillator</i> Walk. San Jose San Pedro San Rafael	<i>Azcardium rhinocarpus</i> <i>Amoma cherimola</i> <i>Cedrela montana</i> mexi- cane	November to January August
<i>Lycoren atergatis</i> (Doubl. and Hewits.) San Pedro	<i>Ficus carica</i>	November December
<i>Mescondyla concordalis</i> Hon.*	<i>Tabebuia pentaphylla</i>	Defoliating trees
<i>Opsiphanes corrosus</i> Stick. San Pedro	<i>Musa paradisiaca</i>	August
<i>Papilio polydamas</i> L. San Pedro	<i>Aristolochia regens</i>	December 21 Ovipositing

* In the Supplement to No. 4 of the Insect Pest Survey Bulletin, Vol. 15, 1935, p. 208, this insect was incorrectly reported as occurring on Couratlen rosea.

Insect and locality	C o l l e c t e d o n	Date and notes
Papilio polyxenes stabilis R. and J. San Pedro	Apium ammi	January November
Papilio thoas autocles Rothschild Sarchi	Citrus aurantium Citrus paradisi	August to February Damaging C. <u>aurantium</u> . Eggs and larvae October 2 to January 4
Phobetrion hipparchia Cram. Paso Ancho	Anacardium rhinocarpus Annona cherimola Annona squamosa Calyptranthes costaricensis	September to December
Pieris elodia Boisd. Paso Ancho San Rafael	Brassica pekinensis Tropaeolum majus	February A serious pest December of nasturtium
Plutella maculipennis (Curt.)	Bixa orellana Brassica oleracea botrytis	January to March
Sibine apicalis Dyar	Coffea arabica Hibiscus rosa-sinensis Musa sapientum	January August September
Sibine opheliens Dyar San Pedro	Coffea arabica	March
Stenoma sororia (Zell.) Sarchi	Cinnamomum camphora	August Causes serious injury November by eating December seed in pods. Seen ovipositing on pods August 5.
Uteuthesis ornatrix (L.) Paso Ancho San Pedro	Crotalaria spectabilis Crotalaria striata	

ORTHOPTERA

Insect and locality	Collected on	Date and notes
<i>Chiriquia serrata</i> Morse Waldeck	<i>Theobroma cacao</i>	April A grasshopper
<i>Chorisoneura gemmicula</i> Hebard Waldeck	<i>Theobroma cacao</i>	April A roach July
<i>Cocconotus ravus</i> Rehn Paso Ancho Tres Rios	<i>Annona cherimola</i> <i>Antigonon leptopus</i> <i>Canangium odoratum</i> <i>Citrus limonia</i> <i>Cupressus benthami</i> <i>Dracaena fragrans</i> <i>Erythrina rubrinervia</i>	A grasshopper Eating lace curtains Serious injury to grapes, roses, etc.
<i>Conocephalus cinereus</i> Thunb. Guadalupe Juan Vinas Paso Ancho	<i>Amygdalus persica</i> <i>Annona cherimola</i> <i>Asparagus officinalis</i> <i>Beta vulgaris crassa</i> <i>Chamaedora bifurcata</i>	February April August September
<i>Ellipes minuta</i> (Scudd.)	<i>Beta vulgaris crassa</i> <i>Brassica oleracea capitata</i> <i>Chrysophyllum cainito</i> <i>Crotalaria spectabilis</i> <i>Cupressus benthami</i> <i>Daucus carota</i>	August
<i>Eriolus longipennis</i> Redt. San Pedro	<i>Ficus carica</i> <i>Ipomoea batatas</i> <i>Persea pitteri</i> <i>Radicula armoracia</i> <i>Solanum tuberosum</i>	November Causes injury December to trees by January oviposition
<i>Eumastax silvicola</i> R. & R. Waldeck	<i>Citrus sinensis</i> <i>Grevillea robusta</i> <i>Persea americana</i> <i>Theobroma cacao</i>	April A grasshopper July

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Euphyllodromia angustata</i> (Latr.) Waldeck	<i>Theobroma cacao</i>	April
<i>Holocompsa azteca</i> Sauss. San Pedro Waldeck	Gramineae (grass) <i>Theobroma cacao</i>	April A roach October
<i>Insara intermedia</i> (Brunn.) Paso Ancho San Jose Tres Rios	<i>Ageratum conyzoides</i> <i>Brassica oleracea</i> capitata <i>Chayota edulis</i> <i>Citrus limonia</i> <i>Coffea arabica</i> <i>Coix lacryma-jobi</i> <i>Coleus blumei</i> <i>Cucurbita pepo</i> <i>Eschscholtzia californica</i> <i>Gomphrena globosa</i> <i>Heliotropium peruvianum</i>	October 14 November eggs and adults Serious damage to chayota and geranium May August November December
<i>Neoxabea bipunctata</i> (Deg.)	<i>Annona cherimola</i> <i>Canarium odoratum</i> <i>Crotalaria juncea</i> <i>Croton gossypifolium</i> <i>Datura candida</i>	May August November December
<i>Panchlora cubensis</i> Sauss.	<i>Mangifera indica</i>	December

Insect and locality	C o l l e c t e d o n	Date and notes
Paratettix mexicanus abortus Hancock	Artemisia absinthium Beta vulgaris Coreopsis lanceolata Cucurbita ficifolia Dahlia rosea Daucus carota	Oryza sativa Phaseolus vulgaris Poinsettia pulcherrima Radicula amoracia Saccharum officinarum Solanum tuberosum
Rhipipteryx biolleyi Sauss. Tres Rios	Brassica oleracea capitata Calyptranthes costaricensis Coix lacryma-jobi Daucus carota Fragaria chiloensis Hibiscus rosa-sinensis	Lactuca sativa Phaseolus vulgaris Raphanus sativus Solanum tuberosum Trifolium fragiferum
Schistocerca impleta Walk. San Jose San Rafael	Amaranthus spinosus Asparagus officinalis Bauhinia purpurea Bidens pilosa Eyrsonima crassifolia Citrus paradisi Crotalaria spectabilis Datura candida Dombeya wallichii Dracaena spp. Galinzoga hispida Gerbera jamesoni Grevillea robusta Indigofera suffruticosa	Ligustrum japonicum Lucuma mammosa Lycopersicum esculentum Panicum barbinode Persea americana Poinsettia pulcherrima Sida rhombifolia Taetsia fruticosa Tripsacum latifolia Zea mays

January Injuring African
August daisy, dracenas,
and Citrus para-
disi.

November to April

August to April

Insect and locality	C o l l e c t e d o n		Date and notes
Stilpnocnoloma azteca (Sauss.) San Pedro	Amygdalus persica Citrus sinensis Coffea arabica Dombeya wallichi Fortunella japonica Ligustrum japonicum	Malus sylvestris Mangifera indica Musa sapientum Passiflora quadrangul- laris Sapium sp.	February March August September November December
Taenioptoda varipennis Rehn San Jose	Chayota edulis Coix lacryma-jobi Ipomoea tiliaacea Nephrolepis sp.	Panicum barbinode Viola odorata Zea mays	July to October December

I S O P T E R A

Nasutermes costalis Holmg. Waldeck	Theobroma cacao		July
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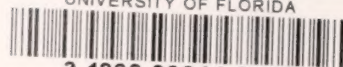
D E R M A P T E R A

Metrosura ruficeps Scudd. Curridabat San Pedro	Citrus sinensis Daucus carota		January Eating carrots November in a pantry. Eating bark from base of orange tree.
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T H Y S A N O P T E R A

Liothrips zeteki Hood San Jose	Persea americana		November to May August A serious pest
Selenothrips rubrocinctus (Giard) Santo Rosa	Theobroma cacao		July

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